# DANIELA TARDITO

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## **EDUCATION**

#### UNIVERSITY OF MILAN

Milan, Italy

### Ph.D. IN PHARMACOGNOSTIC SCIENCES

February 2002

Thesis: Il sistema di trasduzione mediato dall'AMP ciclico nei disturbi psichiatrici: implicazioni fisiopatologiche e farmacoterapeutiche. (The camp-mediated transduction system in psychiatric disorders: pathophysiological and pharmacotherapeutic implications)

Advisor: Prof. Giorgio Racagni

## UNIVERSITY OF MILAN

Milan, Italy

## POST-GRADUATE SPECIALIZATION DIPLOMA IN PHARMACOLOGY

July, 1998

Thesis: Il sistema di trasduzione intracellulare cAMP-dipendente nella fisiopatologia del disturbo bipolare e nel meccanismo d'azione dei sali di litio. (The cAMP-dependent Intracellular Transduction System in the Pathophysiology of Bipolar Disorder and in the Mechanism of Action of Lithium Salts).

Advisor: Prof. Lina Puglisi

#### UNIVERSITY OF MILAN

Milan, Italy

## M.Sc. DEGREE IN BIOLOGICAL SCIENCES

July, 1996

Thesis: Coinvolgimento della fosforilazione proteica nella fisiopatologia del disturbo bipolare e nel meccanismo d'azione dei sali di litio. (Involvement of protein phosphorylation in the pathophysiology of bipolar disorder and in the mechanism of action of lithium salts).

Advisor: Prof. Gabriella Giagnoni; and MD, PhD Jorge Perez

## **AWARDS AND HONORS**

Poster Award at the European Regional Congress of the WFSBP (World Federation of Societies of Biological Psychiatry - WFSBP), Florence, 1999

Poster Award at the XXIInd CINP Congress (Collegium Internationale Neuro-Psychopharmacologicum), Brussels, 2000

Poster Award at the 6° Congresso Nazionale SOPSI (Società Italiana di Psicopatologia), Roma, 2001

Travel Grant for participation in the ECNP Workshop for Young Scientists in Europe, Nice (France), 2006.

## TEACHING EXPERIENCE

#### UNIVERSITY OF MILAN

Milan, Italy

<u>Teaching Assistant, Department of Pharmacological Sciences and Department of Pharmacological and Biomolecular Sciences:</u>

#### 2003-2004

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmacy, Faculty of Pharmacy
- Pharmacological Biotechnologies; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Faculty of Pharmacy
- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments
   Degree Program in Pharmacy, Faculty of Pharmacy, University of Milan

#### 2004-2005

 Pharmacological Biotechnologies; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Faculty of Pharmacy

#### 2005-2006

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments
   Degree Program in Pharmacy, Faculty of Pharmacy.
- Pharmacological Biotechnologies; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Faculty of Pharmacy

#### 2006-2007

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments
   Degree Program in Pharmacy, Faculty of Pharmacy
- Pharmacological Biotechnologies; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Faculty of Pharmacy
- 2007-2008 Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmacy, Faculty of Pharmacy
- Pharmacological Biotechnologies; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments
- Degree Program in Pharmaceutical Biotechnologies, Faculty of Pharmacy
- Drugs for Rare Diseases; Lectures on Alzheimer's disease and pharmacological treatments.
  Degree Program in Pharmacy, Faculty of Pharmacy

#### 2008-2009

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmacy, Faculty of Pharmacy
- Pharmacological Biotechnologies; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Faculty of Pharmacy
- Drugs for Rare Diseases; Lectures on Alzheimer's disease and pharmacological treatments.
  Degree Program in Pharmacy, Faculty of Pharmacy

#### 2009-2010

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmacy, Faculty of Pharmacy
- Pharmacological Biotechnologies; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Faculty of Pharmacy
- Drugs for Rare Diseases; Lectures on Alzheimer's disease and pharmacological treatments.
  Degree Program in Pharmacy, Faculty of Pharmacy
- Neuropsychopharmacology; Lectures on Schizophrenia and pharmacological treatments;
  Mood disorders and pharmacological treatments. Degree Program in Chemistry and
  Pharmaceutical Technology, Faculty of Pharmacy

#### 2010-2011

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmacy, Faculty of Pharmacy
- Pharmacological and Toxicological Biotechnologies; Lectures on Neurodegenerative diseases, Mood disorders, Glucose metabolism disorders, Lipid metabolism disorders and their pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Faculty of Pharmacy
- Drugs for Rare Diseases; Lectures on Alzheimer's disease and pharmacological treatments.
  Degree Program in Pharmacy, Faculty of Pharmacy

#### 2011-2012

- Pharmacology and Pharmacotherapy. Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmacy, Faculty of Pharmacy
- Pharmacological and Toxicological Biotechnologies; Lectures on Neurodegenerative diseases, Mood disorders, Glucose metabolism disorders, Lipid metabolism disorders, and their pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Faculty of Pharmacy
- Stem Cells and Neuropsychopharmacology Neuropsychopharmacology Module;
  Lectures on Schizophrenia and Mood disorders and their pharmacological treatments.
  Degree Program in Pharmaceutical Biotechnologies, Faculty of Pharmacy

#### 2012-2013

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments; Drugs for pain treatment. Degree Program in Pharmacy, Pharmaceutical Sciences
- Pharmacological and Toxicological Biotechnologies; Lectures on Neurodegenerative diseases, Mood disorders, Glucose metabolism disorders, Lipid metabolism disorders, and their pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Pharmaceutical Sciences
- Stem Cells and Neuropsychopharmacology Neuropsychopharmacology Module.
  Lectures on microRNA in mood disorders. Degree Program in Pharmaceutical Biotechnologies, Pharmaceutical Sciences

#### 2013-2014

- Pharmacological and Toxicological Biotechnologies; Lectures on Neurodegenerative diseases, Mood disorders, Glucose metabolism disorders, Lipid metabolism disorders, and their pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Pharmaceutical Sciences
- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmacy, Pharmaceutical Sciences
- Stem Cells and Neuropsychopharmacology; Lectures on microRNA in mood disorders.
  Degree Program in Pharmaceutical Biotechnologies, Pharmaceutical Sciences
- Clinical Trials and Experimental Protocol Evaluation; Lectures on microRNA in neuropsychiatric disorders. Degree Program in Pharmaceutical Biotechnologies, Pharmaceutical Sciences

#### 2014-2015

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and pharmacological treatments; Mood disorders and pharmacological treatments. Degree Program in Pharmacy, Pharmaceutical Sciences
- Integrated Course in Pharmacological and Toxicological Biotechnologies Pharmacology and Pharmacotherapy Module; Lectures on Neurodegenerative diseases, Mood disorders, Glucose metabolism disorders, Lipid metabolism disorders, and their pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Pharmaceutical Sciences Neuropsychopharmacology; Lectures on Mood disorders and their treatment and on
- Neuropsychopharmacology; Lectures on Mood disorders and their treatment and on microRNA in neuropsychiatric disorders. Degree Program in Pharmaceutical Biotechnologies, Pharmaceutical Sciences

#### 2015-2016

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and Mood disorders and their pharmacological treatments. Degree Program in Pharmacy, Pharmaceutical Sciences
- Integrated Course in Pharmacological and Toxicological Biotechnologies Pharmacology and Pharmacotherapy Module; Lectures on Neurodegenerative diseases, Mood disorders, Glucose metabolism disorders, Lipid metabolism disorders, and their pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Pharmaceutical Sciences

Neuropsychopharmacology; Lecture on Epigenetics and Mood Disorders"
 PhD in Experimental and Clinical Pharmacological Sciences

#### 2016-2017

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and Mood disorders and their pharmacological treatments. Degree Program in Pharmacy, Pharmaceutical Sciences
- Integrated Course in Pharmacological and Toxicological Biotechnologies; Pharmacology and Pharmacotherapy Module; Lectures on Neurodegenerative diseases, Mood disorders, Glucose metabolism disorders, Lipid metabolism disorders, and their pharmacological treatments. Degree Program in Pharmaceutical Biotechnologies, Pharmaceutical Sciences
- Neuropsychopharmacology; Lecture on Epigenetics and Mood Disorders. PhD program in Experimental and Clinical Pharmacological Sciences
- Neuropsychopharmacology and Stem Cells; Lectures on Mood disorders and their treatment; microRNA in neuropsychiatric disorders. Degree Program in Pharmaceutical Biotechnologies, Pharmaceutical Sciences

#### 2017-2018

- Pharmacology and Pharmacotherapy; Lectures on Alzheimer's disease and bipolar disorder and their pharmacological treatments. Degree Program in Chemistry and Pharmaceutical Technologies
- Applied Pharmacology; Lecture on microRNA in neuropsychiatric disorders
  Degree Program in Pharmacy, Pharmaceutical Sciences
- Pharmacology; Lectures on G protein-coupled receptors; Dopaminergic transmission and associated drugs. Degree Program in Biotechnology, Pharmaceutical Curriculum
- Neuropsychology and Neuromodulation; Lecture on Mood disorders: pathophysiology and pharmacotherapy. Master's Degree in Cognitive Science and Decision Processes – Applied Cognitive Neuroscience

#### eCAMPUS UNIVERSITY

Novedrate (CO), Italy

#### **Associate Professor**

2018-present – Pharmacology. Degree Program in Biological Sciences, Faculty of Psychology

# OTHER TEACHING ACTIVITIES

2003-2018 – Lecturer at high school student meetings organized by the Center of Excellence for Neurodegenerative Diseases (CEND) at the University of Milan, as part of Brain Awareness Week, delivering seminars on the biological foundations and therapeutic approaches to psychiatric disorders (mood disorders, anxiety disorders, and schizophrenia).

## **TEACHING INTERESTS**

General and molecular Pharmacology, Neuropharmacology; Biological basis of neuropsychiatric disorders

## LEADERSHIP AND SERVICE

### Leadership and Quality Assurance Roles

2017 – October 2018 – Member of the Department Council of Pharmacological and Biomolecular Sciences (DiSFeB), University of Milan, Italy

2017 – October 2018 – Member of the Executive Committee of the Department of Pharmacological and Biomolecular Sciences (DiSFeB), University of Milan, Italy 2018 – Member of the Communication Working Group of the Department of Excellence, Department of Pharmacological and Biomolecular Sciences (DiSFeB), University of Milan, Italy Since August 1, 2019 – Chair of the Degree Program in Biological Sciences, Faculty of Psychology, eCampus University, Italy

Since May 2019 – Member of the Quality Assurance Group for the Degree Program in Biological Sciences, eCampus University, Italy

Since February 2020 – Member of the Quality Assurance Group for Research (GdAQR) in the Department of Applied Sciences and Techniques, eCampus University, Italy

## Academic and Administrative Roles

2017 – October 2018 – Representative of the Technical-Administrative Staff of the Department of Pharmacological and Biomolecular Sciences (DiSFeB), University of Milan, Italy 2018 – October 2018 – Responsible for Risk Assessment Records of the Department of Pharmacological and Biomolecular Sciences (DiSFeB), University of Milan, Italy

# Member of the Editorial Board and/or peer reviewer for international academic journals:

- Behavioral Brain Research; Biology of Mood and Anxiety Disorders; Biomarkers; Clinical Neuropsychiatry; European Neuropsychopharmacology; International Journal of Neuropsychopharmacology; Journal of Affective Disorders; Life Sciences; Molecular Diagnostics and Therapeutics (Frontiers in Molecular Biosciences); Neuropsychobiology; Progress in Neuro-Psychopharmacology & Biological Psychiatry; Psychiatric Research; Psychiatry Journal (Editorial Board); Scientific Reports (Editorial Board); World Journal of Biological Psychiatry (Editorial Board)

<u>Mentorship and Training:</u> Advisor for several Bachelor degree's students, PhD students and junior researchers, supporting them in study design and scientific publication.

<u>Event and Conference Organization:</u> Active participation in planning symposia and workshops on neuroscience and psychiatry. In detail:

- 2005-2008: Scientific coordination of courses organized by the Italian Society of Neuropsychopharmacology (SINPF) as part of the Continuing Medical Education Program of the Italian Ministry of Health.
- Nextstep Young Research Advances, University of Milan, Italy, July 1, 2010
- Nextstep2 Young Research Advances, University of Milan, Italy, Milan, June 24, 2011
- Lake Como School of Advanced Studies 2018 "Genes, Epigenome, and Environment in the Pathophysiology of Brain Illness," Como, Italy, April 9-13, 2018
- Nextstep9 Young Research Advances, University of Milan, Italy, Milan, July 3, 2018
- Connections for Excellence DiSFeB for Excellence, University of Milan, Italy, July 4, 2018

# Scientific Secretariat for National and International Conferences

- XV National Congress of the Italian Society of Neuropsychopharmacology (SINPF), Genoa, June 6-9, 2006
- International Conference on Cognitive Dysfunctions in Schizophrenia and Mood Disorders: Clinical Aspects, Mechanisms, and Therapy, Brescia, January 17-19, 2007
- 2nd Brixia International Conference "Newer vs. Older Pharmacological Treatments for Schizophrenia and Mood Disorders: Selected Areas of Strength and Weakness," Brescia, March 13-15, 2008
- XVI National Congress of the Italian Society of Neuropsychopharmacology (SINPF), Milan, June 24-26, 2008
- 3rd Brixia International Conference "Antipsychotics and Antidepressants: Are the Labels Appropriate or Too Restrictive?" Brescia, May 7-9, 2009
- IV Brixia International Conference "Towards Tailored Therapies in Psychiatry: Relevance of Biological, Psychopathological, and Environmental Factors," Brescia, May 13-15, 2010
- 1st Mediterranean Advanced Course of Psychopharmacotherapeutics "Unipolar Depression," Milan, October 28-30, 2010
- V Brixia International Conference "Standards of Care in Clinical Psychopharmacology: What Future?" Brescia, June 30 July 2, 2011
- 2nd Mediterranean Advanced Course of Psychopharmacotherapeutics "Anxiety and Mood Disorders," Cascais (Portugal), October 26-29, 2011
- 3rd Mediterranean Advanced Course of Psychopharmacotherapeutics "An Update on Psychopharmacology," Marrakech (Morocco), November 7-10, 2012

# PROFESSIONAL EXPERIENCE

# SAN RAFFELE HOSPITAL

Milan, Italy

December 1994 – July 1996 – Experimental internship for the Bachelor's Thesis in Biological Sciences at the Department of Neuropsychiatric Sciences, San Raffaele Hospital, Milan in collaboration with the Neuropharmacology Centre, Institute of Pharmacological Sciences, University of Milan.

1999 – 2001 – Research activities within the PhD program at the Department of Neuropsychiatric Sciences, San Raffaele Hospital, Milan in collaboration with the Neuropharmacology Center, Institute of Pharmacological Sciences, University of Milan

# IRCCS SAN GIOVANNI DI DIO-FATEBENEFRATELLI

Brescia, Italy

1997 – 1999 Research activity as a fellow in collaboration with the Department of Neuropsychiatric Sciences, San Raffaele Hospital (Milan) and the Neuropharmacology Center, Institute of Pharmacological Sciences, University of Milan.

#### **UNIVERSITY OF MILAN**

Milan, Italy

2002 – 2004 – Research activity as a fellow in the project "Glutamatergic Neuroplasticity Mechanisms as Molecular Targets for the Development of Innovative Therapeutic Strategies in Affective Disorders. Department of Pharmacological Sciences, University of Milan.

2006 – Coordinated and Continuous Collaboration Contract for research and educational activities with the Italian Society of Neuropsychopharmacology. Department of Pharmacological Sciences, University of Milan.

2006 – February 2010 – Project Contract (Neuropharmacology Association) for research, education, updating, and training activities aimed at deepening knowledge of molecular mechanisms of psychotropic drugs. Department of Pharmacological Sciences, University of Milan.

2010 – 2012 – Research activity within the project "The Regulation of Neuroplasticity in the Response to Therapeutic Drugs for Mood Disorders: The Role of microRNAs. Department of Pharmacological Sciences

2012 – 2013 – Research activity within the projects:

- The Regulation of Neuroplasticity in the Response to Therapeutic Drugs for Mood Disorders: The Role of microRNAs (PI).
- Lombardy Excellence Network for the Development of Natural-Origin Drugs Targeting Tissue Microenvironment Modulation for the Prevention and Treatment of Tumors and Neurodegenerative Diseases NEPENTE Project.

Department of Pharmacological and Biomolecular Sciences.

October 2013 – Research activity within the projects:

- Physiology and Pathophysiology of BDNF: Towards the Development of New Therapeutic Strategies for Major Neuropsychiatric Disorders.
- The Role of microRNAs in Antidepressant Drug Action.

Department of Pharmacological and Biomolecular Sciences.

2014 – October 2018 – Research and teaching support at the Department of Pharmacological and Biomolecular Sciences.

#### **ECAMPUS UNIVERSITY**

Novedrate, Italy

October 2018 – at present – Associate professor of Pharmacology August 2019 – at present - Coordinator of the bachelor degree in Biological Sciences

# ORGANIZATION, DIRECTION, AND COORDINATION OF FUNDED PROJECTS

Role: Principal Investigator or Co-Principal Investigator

2009-2013 – The Regulation of Neuroplasticity In The Response To Therapeutic Drugs For Mood Disorders: The Role Of MicroRna. Funded By Fondazione Cariplo, Biomedical Research Grant 2009.

2011-2014 – A Role For Micrornas In The Action Of Agomelatine: New Insights Into The Onset Of Action And Synergic Mechanism. Funded By Institut De Recherches Internationales Servier (I.R.I.S).

# Participation In Funded Projects

- 2002 Structural and Molecular Synaptic Changes Induced by Antidepressants. NARSAD Project,
- 2002 Glutamatergic Neuroplasticity Mechanisms as Molecular Targets for Innovative Therapeutic Strategies in Affective Disorders. Prin 2001-2002
- 2003 Glutamatergic Neuroplasticity Mechanisms as Molecular Targets for Innovative Pharmacological Strategies in Affective Disorders: Mechanisms and Potential Targets Prin 2003 (2003-2005).
- 2004 Genome-Based Therapeutic Drugs for Depression. Fp6-Lifescihealth (6th Framework Programme, European Community).
- 2005 Anxiety and Stress-Related Disorders: New Mechanisms and Pharmacological Targets Prin Prot. 2005054953 (2006-2008).
- 2006 Characterization of the Action of Agomelatine on Molecular and Functional Correlates of Neuroplasticity. Funded By Servier.
- 2007 Glutamate Release and Presynaptic Molecular Mechanisms in Psychiatric Disorders Related to Stress and Psychotropic Drug Action: Search for New Pharmacological Targets Prin (2008-2010).
- 2008 Innovative Therapeutic Strategies for Depression: New Pharmacological Targets and New Preclinical Models for Personalized Treatments. Miur Research Grant (2008)
- 2008 Characterization of Glutamate Release, Intracellular Signaling Pathways, and Neuroplastic Mechanisms Affected by Agomelatine Treatment: Molecular Dissection of Melatonergic Vs. 5-Ht2c-Directed Action. Funded by Institut De Recherches Internationales Servier (I.R.I.S).
- 2009 The Stressed Synapse: Synaptic Effects of Behavioral Stress and Antidepressant Action Prin (2011-2013).
- 2010-2011 Physiology and Pathophysiology Of BDNF: Towards the Development of New Therapeutic Strategies for Major Neuropsychiatric Disorders. Prin (2010-2013).
- 2011-2013 Nepente Project Lombardy Excellence Network for The Development of Natural-Origin Drugs Aimed at Modulating the Tissue Microenvironment for The Prevention and Treatment of Tumors and Neurodegenerative Diseases. Funded by Regione Lombardia 2015 Maladaptive Stress Responses: Study of Regulatory Mechanisms to Identify New Therapeutic Targets in Neuropsychiatric Disorders. Prin 2015, National Research Group 2017 Micrornas in Frailty-Associated Cognitive Impairment. Funded By Fondazione Cariplo, Biomedical Research Grant on Aging-Related Diseases (2017-0620)

# **TECHNICAL SKILLS**

During her research activity, she has participated in several studies, including as a principal investigator, exploring the mechanisms of action of psychotropic drugs, the molecular underpinnings of neuropsychiatric diseases, as well as markers associated with both diagnosis and response to treatment. Her main research fields have been: the role of the cAMP dependent phosphorylation system in both the pathophysiology and pharmacotherapy of different psychiatric disorders (i.e. major depression, bipolar disorder, schizophrenia, among the others), study and identification of the mechanisms of action of psychotropic drugs and vulnerability factors for psychiatric disorders; epigenomic analysis and genomic correlates in mood and anxiety disorders; the role of microRNA in both the mechanism of action of antidepressant drugs and as biomarkers for diagnosis and treatment of mood disorders; the analysis of glutamatergic

synapse plasticity in stress-related depressive and anxiety disorders and the effects of antidepressant-active drugs; identification of central and peripheral diagnostic markers for Alzheimer's disease and amyotrophic lateral sclerosis.

# **PUBLICATIONS**

# **Book Chapters**

**Tardito D**. Inibitori reversibili delle MAO-A (Rima). In: Psicofarmacologia Clinica (Schatzberg e Nemeroff). Masson ed. Milano, 2003, pp. 43-54. Isbn 88-214-2648-3

**Tardito D**. Amisulpride. In: Psicofarmacologia Clinica (Schatzberg E Nemeroff). Masson ed. Milano, 2003, pp. 55-74. Isbn 88-214-2648-3.

**Tardito D**. Reboxetina. In: Psicofarmacologia Clinica (Schatzberg E Nemeroff). Masson ed. Milano, 2003; pp. 103-112. Isbn 88-214-2648-3.

Mallei A, Giambelli R, El Khoury A, Gruber Shm, Musazzi L, Barbiero Vs, **Tardito D**, Vollmayr B, Gass P, Mathé Aa, Racagni G, Popoli M. Synaptoproteomics of existing and new animal models of depression. In "Biomarkers For Psychiatric Disorders". 2008, p. 185-202 (CW Turck Editor), isbn: 9780387792507, doi:10.1007/978-0-387-79251-4 8

# **Peer Reviewed Paper**

Mori S, **Tardito D**, Dorigo A, Zanardi R, Racagni G, Perez J. Effects of lithium on cAMP-dependent protein kinase in rat brain. Neuropsychopharmacology, 1998;19:233-240. ISSN: 0893-133X

Perez J, **Tardito D**, Mori S, Racagni G, Smeraldi E, Zanardi R. Abnormalities in cyclic adenosine monophosphate signaling in platelets from untreated patients with bipolar disorder. Archives of General Psychiatry, 1999;56:248-253. ISSN: 0003-990X

Perez J, **Tardito D**, Ravizza L, Racagni G, Mori S, Maina G. Altered cAMP-dependent protein kinase A in platelets of patients with obsessive-compulsive disorder. American Journal of Psychiatry, 2000;157:284-286. ISSN: 0002-953X

Perez J, **Tardito D**, Mori S, Racagni G, Smeraldi E, Zanardi R. Abnormalities of cAMP signaling in affective disorders: Implication for pathophysiology and treatment. Bipolar Disorders, 2000;2:27-36. ISSN: 1398-5647

Perez J, **Tardito D**, Mori S, Racagni G, Smeraldi E, Zanardi R. Altered rap1 endogenous phosphorylation and levels in platelets from patients with bipolar disorder. Journal of Psychiatric Research, 2000;34:99-104. ISSN: 0022-3956

- **Tardito D**, Tura GB, Bocchio L, Bignotti S, Pioli R, Racagni G, Perez J. Abnormal levels of cAMP-dependent protein kinase regulatory subunits in platelets from schizophrenic patients. Neuropsychopharmacology, 2000;23:216-219. ISSN: 0893-133X
- Perez J, **Tardito D**, Racagni G, Smeraldi E, Zanardi R. Protein kinase A and Rap1 levels in platelets of untreated patients with major depression. Molecular Psychiatry, 2001;6;44-49. ISSN: 1359-4184
- Perez J, **Tardito D**. Implicationes de la senal AMPc en los trastornos afectivos. Vertex. Rev Arg de Psiquiatria. 2001;XII:21-26. ISSN 0327-6139
- **Tardito D**, Maina G, Tura GB, Bogetto F, Pioli R, Ravizza L, Racagni G, Perez J. The cAMP-dependent protein kinase substrate Rap1 in platelets from patients with obsessive compulsive disorder or schizophrenia. European Neuropsychopharmacology, 2001;11:221-225. ISSN: 0893-133X
- Perez J, **Tardito D**. Implications of the cAMP signaling pathway in psychiatric disorders: A systematic review of the evidence. CNS Spectrum, 2001;6:294-305. ISSN: 1092-8529
- Perez J, **Tardito D**, Racagni G, Smeraldi E, Zanardi R. cAMP signaling pathway in depressed patients with psychotic features. Molecular Psychiatry, 2002;7:208-212. ISSN: 1359-4184
- **Tardito D**, Zanardi R, Racagni G, Manzoni T, Perez J. The protein kinase A in platelets from patients with panic disorder. European Neuropsychopharmacology, 2002;12:483-487. ISSN: 0924-977X
- Perez J, **Tardito D**. The interface between depression and cerebrovascular disease- some hope but no hype. Clinical and Experimental Hypertension 2002;24:639-646. ISSN: 1064-1963
- **Tardito D**§, Mori S, Racagni G, Smeraldi E, Zanardi R, Perez J. Protein kinase A activity in platelets from patients with bipolar disorder. Journal of Affective Disorders, 2003;76:249-253. ISSN: 0165-0327; § Corresponding Author
- Cavazzin C, Bonvicini C, Nocera A, Racchi M, Kasahara J, **Tardito D**, Gennarelli M, Govoni S, Racagni G, Popoli M. Expression and phosphorylation of δ-CaM kinase II in Alzheimer skin fibroblasts. Neurobiology of Aging. 2004;25:1187-1196. ISSN: 0197-4580
- Tiraboschi E, **Tardito D**, Kasahara J, Moraschi S, Pruneri P, Gennarelli M, Racagni G, Popoli M. Selective phosphorylation of nuclear CREB by fluoxetine is linked to activation of CaM kinase IV and MAP kinase cascades. Neuropsychopharmacolology, 2004;29:1831-1840. ISSN: 0893-133X
- **Tardito D**, Perez J, Tiraboschi E, Musazzi L, Racagni G, Popoli M. Signaling pathways regulating gene expression, neuroplasticity and neurotrophic mechanisms in the action of antidepressants. A critical overview. Pharmacological Reviews, 2006; 58:115-134. ISSN: 0031-6997

- Barbon A, Popoli M, La Via L, Moraschi S, Vallini I, **Tardito D**, Tiraboschi E, Musazzi L, Giambelli R, Gennarelli M, Racagni G, Barlati S. Regulation of editing and expression of glutamate alpha-amino-propionic-acid (AMPA)/kainate receptors by antidepressant drugs. Biological Psychiatry. 2006;59:713-720. ISSN: 0006-3223
- **Tardito D**, Gennarelli M, Musazzi L, Gesuete R, Chiarini S, Barbiero VS, Rydel RE, Racagni G, Popoli M. Long-term soluble Ab1-40 activates CaM kinase II in organotypic hippocampal cultures. Neurobiology of Aging, 2007;28:1388-1395. ISSN: 0197-4580
- **Tardito D**§, Tiraboschi E, Kasahara J, Racagni G, Popoli M. Reduced CREB phosphorylation after chronic lithium treatment is associated to downregulation of CaM kinase IV in rat hippocampus. International Journal of Neuropsychopharmacology, 2007;10:491-496. ISSN: 1461-1457
- Barbiero VS, Giambelli R, Musazzi L, Tiraboschi E, **Tardito D**, Perez J, Drago F, Racagni G, Popoli M. Chronic antidepressants induce redistribution and differential activation of δCaM kinase II between presynaptic compartments. Neuropsychopharmacology, 2007;32:2511-2519. ISSN: 1461-1457
- Donnici L, Tiraboschi E, **Tardito D,** Musazzi L, Racagni G, Popoli M. Time-dependent biphasic modulation of human BDNF by antidepressants in neuroblastoma cells. BMC Neurosciences, 2008 Jul 5;9(1):61. ISSN: 1471-2202
- Ryan B, Musazzi L, Mallei L, **Tardito D**, Gruber SHM, El Khoury A, Anwyl R, Racagni G, Mathé AA, Rowan MJ, Popoli M. Remodeling by early-life stress of NMDA receptor-dependent synaptic plasticity in a gene-environment rat model of depression. International Journal of Neuropsychopharmacology, 2009,12:553-559. ISSN: 1461-1457
- **Tardito D**, Musazzi L, Tiraboschi E, Mallei A, Racagni G, Popoli M. Early induction of CREB activation and CREB-regulating signaling by antidepressants. International Journal of Neuropsychopharmacology 2009;12:1367-1381. ISSN: 1461-1457
- Musazzi L, Cattaneo A, **Tardito D**, Barbon A, Gennarelli M, Barlati S, Racagni G, Popoli M. Early raise of BDNF in hippocampus suggests induction of posttranscriptional mechanisms by antidepressants. BMC Neurosciences 2009;13;10:48. ISSN: 1471-2202
- Musazzi L, Mallei A, **Tardito D**, Gruber SHM, El Khoury A, Racagni G, Mathé AA, Popoli M. Early-life stress and antidepressant treatment involve synaptic signaling and Erk kinases in a gene-environment model of depression. Journal of Psychiatric Research 2010;44:511-520. ISSN: 0022-3956
- Musazzi L, Milanese M, Farisello P, Zappettini S, **Tardito D**, Barbiero VS, Bonifacino T, Mallei A, Baldelli P, Racagni G, Raiteri M, Benfenati F, Bonanno G, Popoli M. Acute stress increases depolarization-evoked glutamate release in the rat prefrontal/frontal cortex: the dampening action of antidepressants. PLoS One 2010 Jan 5;5(1):e8566. ISSN: 1932-6203

- **Tardito D**, Milanese M, Bonifacino T, Musazzi L, Grilli M, Mallei A, Mocaer E, Gabriel-Gracia C, Racagni G, Popoli M, Bonanno G. Blockade of stress-induced increase of glutamate release in the rat prefrontal/frontal cortex by agomelatine involves synergy between melatonergic and 5-HT2C receptor-dependent pathways. BMC Neuroscience 2010;3;11:68. ISSN: 1471-2202
- Milanese M, Zappettini S, Onofri F, Musazzi L, **Tardito D**, Bonifacino T, Messa M, Racagni G, Usai C, Benfenati F, Popoli M, Bonanno G. Abnormal exocytotic release of glutamate in a mouse model of amyotrophic lateral sclerosis. Journal of Neurochemistry 2011; 116(6):1028-1042. ISSN: 0022-3042
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#### **PRESENTATIONS**

Prof. Tardito has presented approximately 150 abstracts for posters and oral communications at national and international congresses.

September 1997: cAMP-dependent phosphorylation in euthymic bipolar patients. VII National Congress of the Italian Society of Neuroscience, Brescia (September 20-23, 1997).

June 1998: The cAMP-dependent protein phosphorylation system as a biological marker in bipolar disorder. XI Congress of the Italian Society of Neuropsychopharmacology, Trieste (June 10-13, 1998).

December 1998: Alterations in the cAMP-mediated signaling pathway in platelets from euthymic bipolar patients. Italian Society of Neuroscience, Pisane Days of Young Scholars in Neuroscience, Pisa (December 17-18, 1998).

September 1999 Abnormalities in cAMP-dependent protein kinase and rap1 levels in platelets from patients with major depression. VIII National Congress of the Italian Society of Neuroscience, Rome (September 26-29, 1999).

February 2001 Alterations in the cAMP-mediated signaling pathway in platelets from unipolar patients. 6th National Congress of the Society of Psychopathology, Rome (February 21-25, 2001).

September 2005- VII National Congress FISV. Special Interest Subgroup symposium: Signaling Pathways in Molecular Psychiatry. Presentation title: Antidepressants, lithium, signaling cascades, and CREB modulation., Riva del Garda, Italy (September 22-25, 2005).

Seminar: Selective action of antidepressant and mood-stabilizing drugs in the signaling cascades that regulate gene expression and neuroplasticity. Department of Pharmacological Sciences, University of Milan. 24-06-2005

Seminar within the scientific meeting program Biology and pathophysiology of dementias and mental disorders. Presentation title: Differential modulation of intracellular signaling cascades in the mechanism of action of antidepressant drugs and the stabilizing effect of lithium salts. Centro S. Giovanni di Dio, Fatebenefratelli, Brescia. 06-02-2006

Seminar: Effects of stress on glutamatergic transmission and the protective action of antidepressant drugs. Department of Pharmacological Sciences, University of Milan. 24-11-2008

October 2009 - Acute behavioral stress increases glutamate release and presynaptic SNARE complex accumulation in the prefrontal/frontal cortex. The dampening action of antidepressants. 34th Congress of the Italian Society of Pharmacology, Rimini (October 14-17, 2009).

Seminar: Stress and glutamatergic transmission in mood and anxiety disorders. The action of antidepressant drugs. Department of Pharmacological Sciences, University of Milan. Presentation title: 23-04-2010

Discussant at the seminar: The regulation of the miRNome in depression: pathogenesis and mechanisms of action of antidepressant drugs. IRCCS Centro S. Giovanni di Dio-Fatebenefratelli, Brescia. 18-04-2011

Invited speaker at the 2nd Inspire Meeting What makes a good homeostat? Influencing circadian and sleep-wake regulation for prevention and intervention in mood and anxiety disorders. Viareggio (April 24-26, 2014). Presentation title: Modulation of the hippocampal miRNome: a homeostatic mechanism for the action of agomelatine? 25-04-2014

Invited speaker at the symposium MicroRNAs: leading actors in the scenario of mood disorder etiology and treatment, presenting Early and time-dependent effects of antidepressant treatments on the rat hippocampal miRNome. 28th ECNP Congress, Amsterdam. Nederland, 29 August-3 September 2015.

## **REFERENCES**

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